

ABSTRACTMOISTURE SENSOR WITH CAPACITIVE MOISTURE MEASURING ELEMENT  
AND METHOD OF DETERMINING AIR HUMIDITY

In a method of determining air humidity, a capacitive moisture measuring  
5 element (2) used in a moisture sensor for calculation operations is modelled by a  
parallel circuit of an ideal capacitor (C) and an ohmic resistance (Rp). Charging and/or  
discharging of the capacitive moisture measuring element (2) by way of a first  
measuring resistor (R1; RA) provides for ascertaining a first time constant or a first  
period duration of the charging and/or discharging operation, and charging and/or  
10 discharging of the moisture measuring element (2) by way of a second measuring  
resistor (R2; RA/R) provides for ascertaining a second one. The capacitance (C) of the  
moisture measuring element (2) is then calculated from the two time constants or the  
two period durations, a value for the moisture level finally being ascertained from the  
capacitance. This method achieves a higher level of measuring accuracy on the part of  
15 the moisture sensor.

(Figure 2)